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EXAMINER

LAY, MICHELLE K

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2628

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10/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,994	Applicant(s) SAKANISHI ET AL.	
	Examiner MICHELLE K. LAY	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,7-22,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,7-22,25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The amendment filed 07/31/2008 has been entered and made of record. Claims 2, 5, 6, 23, and 24 have been cancelled. Claims 1, 3, 4, 7-22, 25, and 26 are pending.

A statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101"). Therefore, method claim **22** is statutory under 35 USC 101 because the method is tied to an apparatus (i.e., *the plurality of images are simultaneously projected onto a projection screen* cited on line(s) 4).

Response to Arguments

Applicant argues Matsumoto et al. (US Pat No. 6,473,088) fails to teach or suggest performing readjustment by prioritizing images on which readjustment is performed currently. Examiner respectfully disagrees. Matsumoto teaches allocating display priorities [c.7 L.55-56] where the priorities are re-allocated based on the selected window where the above described priority history record is updated [c.9 L.47-57; Fig. 6] as the enlargement action alters the selected input (i.e., not perform readjustment on other image).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim **26** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 26 recites, "A program stored on a computer-readable medium", however Applicant's disclosure teaches the program can be distributed through transmission media such as storage media [0019] but fails to disclose a computer-readable medium.

It is noted that because the program can be distributed through transmission media such as storage media (for example CD-ROM) and Internet [0019], claim 26 can be considered a signal claim in light of the specification. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in §101. Therefore, in order to avoid a 35 USC §101 rejection, claim 26 should be limited to only the "storage media" as recited in Applicant's disclosure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims **1, 3, 4, 7, 8, 10, 12-15, 17, 22, 25, and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (US Pat No. 6,473,088) in view of Barak (US Pat. No. 5,833,338) and Parulski et al. (5,414,811).

Matsumoto teaches the limitations of claims 1, 3, 4, 7, 8, 10, 12-15, 17, 22, 25, and 26 with the exception of explicitly disclosing a display device that projects the image and full-screen mode. However Barak teaches displaying images via a projector and Parulski teaches a system for displaying digitized images on a screen in full-mode.

In re claims **1, 22, 25, and 26**, Matsumoto discloses a plurality of image generating apparatuses, each of which is operable to generate an image [*Fig. 1, (101-104); c.4 L.45-49*]; an image apparatus operable to display the plurality of images transmitted from said image generating apparatus through a multimode [*Fig. 1 (700); Fig. 5; display (700) display images from computers (101-104)*], in which the plurality of images are simultaneously displayed on a display screen divided into a plurality of segments [*Fig. 5; inputs 1-4*], image generating apparatus includes: an image generating unit operable to generate an image [*Fig. 1 (101-104)*], a transmission image adjustment unit operable to perform image adjustment on one of an image transmission and an image projection

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by said image projecting apparatus [Fig. 1 (101-104)]; and a transmission unit operable to transmit the adjusted image to said image projecting apparatus [Fig. 1 (201-204)]; and said image projecting apparatus includes: a receiving unit operable to receive the image transmitted from said image generating apparatus [Fig. 1 (301-304); c.4 L.45-49]; an output image adjustment unit operable to judge a content of the adjustment performed on the received image, and then to perform readjustment on the image based on the judgment [Fig. 1 (900); *the control portion (500) can detect the frequency, screen size and frame rate for each of the signal transmitted along the signal lines (201-204) (said adjusted received image). The display drive controller (900) further adjusts the screen images on the display in accordance with the received task instruction information (said output image adjustment); c.6 L.63-65; c.7 L.47-56*], and a display to display the image [Fig. 1, 700], said transmission image adjustment unit is operable to perform image adjustment that corresponds to one of the multimode and a full-screen mode for projecting an image onto an entire of the projection screen of said image projecting apparatus [Fig. 3 (ST200) *Matsumoto teaches a window selection process, user can select a window (input 1-4). Fig. 11 further teaches window enlarging action. The display position and the size of the display window that is changed by the resolution conversion (enlargement) action are altered (display position information parameters for the input data to be enlarged are prepared; c.11 L.39-50. See rationale of Parulski.*]; and said output image adjustment unit is operable to perform readjustment by prioritizing the images on which readjustment is performed current [Matsumoto teaches display priorities are allocated c.7 L.55-56; priorities are re-allocated based on the

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selected window and the above described priority history record is updated c.9 L.47-57; Fig. 6; as the enlargement action alters the selected input (said not perform readjustment on other image)].

Parulski discloses multiple display modes of digitized images. With regards to Fig. 5, the display mode is used when the "single" key (250) is depressed. Rows and columns of image data pixels in a first image memory are mapped to the pixels of the display. If the image data includes more than 512 rows or more than 768 columns, then rows or columns of image data are decimated in a suitable ratio to the total number of rows or columns [c.11 L.25-33]. It would have been obvious to one of ordinary skill in the art to include the full-screen mode of Parulski with the enlargement feature of Matsumoto because a user can then view the image with the highest priority without the distraction of the other images in the viewable background.

Barak discloses a projector used as a display device for a computer [c.1 L.7-13]. It would have been obvious to one of ordinary skill in the art to further include a projector in the display examples of Matsumoto because the amount of light that can be transmitted through a conventional color liquid crystal panel assembly is limited by the amount of light that can be absorbed by the liquid crystal panel without degradation of its performance and permanent damage thereto inter alia mainly due to overheating [c.1 L.13-22]. Thus, by using the projector of Barak to display the images as taught by Matsumoto, the above limitations are diminished.

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In re claims **3** and **4**, Parulski discloses switching to full screen mode to be displayed [Fig. 5, c.11 L.25-33] and using the output image adjustment device to adjust the changes from full-mode and multi-mode [Fig. 3 (59,57,55)]. The same rationale for combining as applied to claim 1 is incorporated herein. Furthermore, it is noted that the combined systems can go from multimode to full mode and back to multimode based on the priority and selected images as taught by the enlargement action of Matsumoto.

In re claim **7**, Matsumoto discloses an index mode which displays a plurality of images simultaneously by dividing up the screen in a main area and a plurality of sub-areas [Fig. 9, *input (4) is the main area due to its priority being first, with the remaining inputs (1-3) being sub-areas, c.10 L.50-65*].

In re claim **8**, Matsumoto teaches a section acceptance unit operable to accept a selection of an image out of the plurality of images respectively projected onto the plurality of sub-areas [Fig. 9, *selecting input 4 out of inputs 1-4*] and; said output image adjustment unit is operable to perform readjustment the selected image, and then to project the selected image on the main area [Fig. 9, *as input 4 is selected, the windows of inputs 1-4 are moved to depict the priorities have changed, making input 4 in the front (i.e., main area) c.10 L.47-65*].

In re claim **10**, Matsumoto discloses the transmission image adjustment unit specifies position on the projection screen [Fig. 1 (201-204) to (900); step. S102 determines the

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connection conditions (i.e., screen size, input data rate). At step S103, a display layout for determining the display location and the magnification rate is performed, so that based on the screen size determined, the sizes of all the input data image displayed on the screen of display device (700), c.7 L.45-54], and said output image adjustment unit is operable to judge the specified position and to place the image on the position on the projection screen [S105, scalability is controlled c.8 L.1-55].

In re claims **12** and **13**, Parulski discloses a computer system, which can receive resolution as inputted by the user and using that information can adjust the resolution which can fit the display [c.5 L.14-31]. The same rationale for combining as applied to claim 1 is incorporated herein.

In re claim **14**, Parulski discloses a computer system, which can receive resolution as inputted by the user and using that information can adjust the resolution [c.5 L.14-31]. The same rationale for combining as applied to claim 1 is incorporated herein.

In re claim **15**, Matsumoto discloses the transmission image adjustment device is operable to set an area in the image to be transmitted [Fig. 1, (101-104), *the computers send whole images and so inherently send areas in the image to the display*].

In re claim **17**, Parulski discloses the user specifies the image to be displayed [c.13 L.3-15]. It would have been obvious to one of ordinary skill to combine the multi image

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system of Matsumoto with the user selected images of Parulski with the motivation of selecting the images one wants to see.

2. Claims **9**, **11**, and **16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (US Pat No. 6,473,088) in view of Barak (US Pat. No. 5,833,338) and Parulski et al. (5,414,811) as applied to claim 1, and in further view of Dayton et al. ("Photoshop 5/5.5 Wow! Book" Copyright 2000).

Matsumoto in view of Barak and Parulski teaches the limitations of claims 9, 11, and 16 with the exception of a separation unit. However, Dayton discloses separating images into layer.

In re claim **9**, Dayton discloses separating images into layers and displaying layer or removing layers [pg.90-91]. It would have been obvious to one of ordinary skill in the art to use the multi image display device of Matsumoto and use the image modifying of Dayton with the motivation of selecting and displaying portions of an image.

In re claim **11**, Dayton et al. discloses the ability alter the dimension of an image or the resolution of the image which is operable to fit it to the size of the screen [pg.55-56]. It would have been obvious to one of ordinary skill to use the multi image display device of Matsumoto and use the image modifying of Dayton with the motivation of see the whole image instead of portion of it.

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In re claim **16**, Dayton et al discloses separating images into layers and displaying layer or removing layers [pg. 90-91, *which one layer on the front and since the whole image is sent the front most layer is also sent*]. It would have been obvious to one of ordinary skill to use the multi image display device of Matsumoto and use the image modifying of Dayton with the motivation of selecting and displaying portion of an image.

3. Claim **18** is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (US Pat No. 6,473,088) in view of Barak (US Pat. No. 5,833,338) and Parulski et al. (5,414,811) as applied to claim 1, and in further view of Taaffe et al. (5,046,027).

Matsumoto in view of Barak and Parulski teaches the limitations of claim 18 with the exception of compression and decompression. However, Taaffe discloses compressing the image [c.2 L.27-50] and transferring the data which is then decompressed [c.6 L.14-28]. It would have been obvious to one of ordinary skill to combine the multi image display system of Matsumoto with the integration of compression and decompression of Taaffe with the need to reduce bandwidth usage and latency.

4. Claim **19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (US Pat No. 6,473,088) in view of Barak (US Pat. No. 5,833,338) and Parulski et al. (5,414,811) as applied to claim 1, and in further view of Karasawa et al. (2002/0122075).

Matsumoto in view of Barak and Parulski teaches the limitations of claim 19 with the exception of explicitly teaching authorization related to the display of the images. However, Karasawa discloses authorization code need to access the images [0267]. It would have been obvious to one of ordinary skill to combine the multi image display device of Matsumoto with the authorization code of Karasawa with the need to limit what other can access.

5. Claim **20** is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (US Pat No. 6,473,088) in view of Barak (US Pat. No. 5,833,338) and Parulski et al. (5,414,811) as applied to claim 1, and in further view of Johnson et al. (5,264,838).

Matsumoto in view of Barak and Parulski teaches the limitations of claim 20 with the exception of explicitly teaching prediction of the image and adjusting the image. However, Johnson discloses an anti-aliasing device which automatically predict the image is aliased and anti-aliases the image pre projection [c.5 L. 15-35]. It would have been obvious to one of ordinary skill to use the multi-image device of Matsumoto with the anti-aliasing device of Johnson with the motivation of making sure the images are a clear.

6. Claim **21** is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (US Pat No. 6,473,088) in view of Barak (US Pat. No. 5,833,338) and

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Parulski et al. (5,414,811) as applied to claim 1, and in further view of Hua (2004/0013434).

Matsumoto in view of Barak and Parulski teaches the limitations of claim 21 with the exception of explicitly teaching remote controller which is programmable with the ability to do user commands. However, Hua discloses a programmable remote control inputted by user commands [*Fig. 3*]. It would have been obvious to one of ordinary skill to combine the multi image system display system of Matsumoto et al. and Barak with a remote control of Hua with the motivation to control what is displayed which also has the flexibility of being user programmed so as to do many operations efficiently.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle K. Lay whose telephone number is (571) 272-7661. The examiner can normally be reached on Monday-Friday 7:30a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee M. Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle K. Lay/
Examiner, Art Unit 2628
10 October 2008

/Kee M Tung/
Supervisory Patent Examiner, Art
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